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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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|-----------------|-------------|----------------------|---------------------|------------------|

10/567,303

02/06/2006

Chandrika Varadachari

SMC-PT003

4894

3624 7590 08/12/2009

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EXAMINER

LANGEL, WAYNE A

ART UNIT

PAPER NUMBER

1793

MAIL DATE

DELIVERY MODE

08/12/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|---|--|
| Office Action Summary | Application No. 10/567,303 | Applicant(s) VARADACHARI, CHANDRIKA | |
| | Examiner Wayne Langel | Art Unit 1793 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 August 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 and 16-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 and 16-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-14 and 16-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lyons et al, for the reasons of record. Applicant's argument, that there is no nitrogen compound in the polymerization stage in the process recited in applicant's claims, is not convincing. Applicant's claims do not exclude the presence of a nitrogen compound in the polymerization stage, since the term "consisting of" would limit the process to the steps of "heating", "neutralizing", "drying" and "pulverizing", but would not limit the various steps to the materials specifically recited as being worked on. In other words, step (a) as recited in claim 1 would not exclude the presence of an ammoniating and condensing agent in the mixture which is polymerized. Applicant's argument, that Lyons et al state in column 4, lines 65-71 that temperatures at 180 C or lower result in the need for time periods between 30-36 hours, is not convincing, since this passage refers to the situation when substantially complete conversion to ammonium polyphosphate is desired before adding potassium. Lyons et al also teach at col. 4, lines 57-64 that relatively low temperatures and a relatively short heat treating time period may be employed when it is desired to heat treat the reaction product short of substantially complete conversion before adding the conversion. It would not be unexpected from such disclosure in Lyons et al that a heating temperature of at least 160 C for a time period ranging from 20 minutes to 2 hours could be employed.

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Applicant's argument, that the process recited in claim 1 does not result in full polymerization because the reaction is stopped midway when it is still liquid, is not convincing, since the reaction of Lyons et al would be stopped when it is still liquid in the process of Lyons et al in the embodiment disclosed at column 4, lines 57-64. Applicant's argument, that it is not clear how much Fe or Mn the process of Lyons et al could load in the process but it is seen in the single example that the Cu content of the fertilizer is only 2.9%, is not convincing, since Example 1 of Lyons et al entails heating to complete polymerization, as opposed to heating short of complete polymerization followed by addition of potassium, as disclosed at col. 4, lines 57-64.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wayne Langel whose telephone number is 571-272-1353. The examiner can normally be reached on Monday through Friday, 8 am - 3:30 pm Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley Silverman can be reached on 571-272-1358. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Wayne Langel/
Primary Examiner, Art Unit 1793
